



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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Pine Barrens Zale

Zale sp. 1 near *lunifera*

State Status: **Special Concern**

Federal Status: None

Description: Not formally described in published scientific literature, the Pine Barrens Zale is a noctuid moth with the forewings mottled with dark and pale grays, shaded brownish-black both basally and apically; the brown antemedian line is thick, the postmedian line thin and wavy; the yellowish-brown reniform spot is narrow and elongate and the black orbicular spot small; the hind wings are banded with dark and pale grays. Wingspan is 30-34 mm.

Habitat: In Massachusetts the Pine Barrens Zale inhabits sandplain pitch pine-scrub oak barrens, especially scrub oak thickets, as well as open oak woodland on Martha's Vineyard.

Life History: Adult moths fly in late May and early June. Eggs hatch soon after laying, and the larvae feed on scrub oak (*Quercus ilicifolia*). Larvae pupate in late July or early August, and pupae overwinter.

Range: The Pine Barrens Zale is spottily distributed from southern Maine to southern New Jersey, also occurring in the mountains of Pennsylvania and Virginia. In Massachusetts this species occurs primarily on the southeast coastal plain, with one population in the Connecticut River Valley.

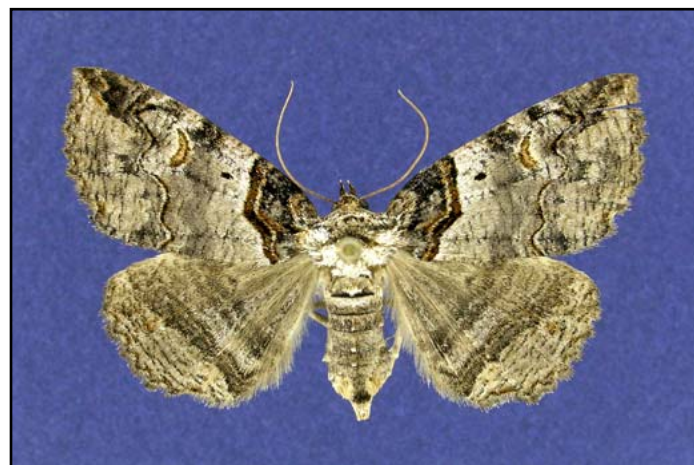


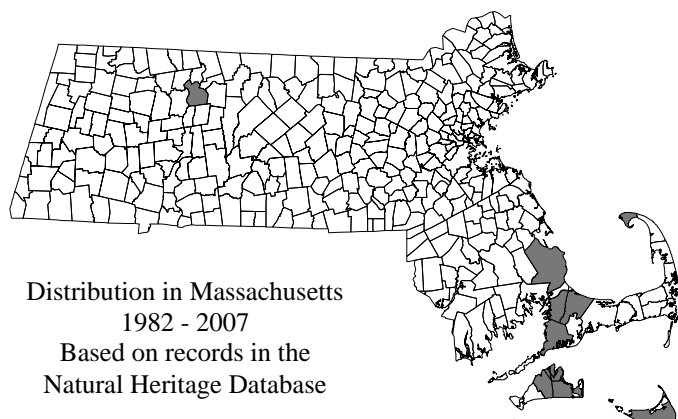
Photo by M.W. Nelson

Adult Flight Period in Massachusetts

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Threats

- Habitat loss
- Fire suppression
- Invasion by exotic plants
- Introduced generalist parasitoids
- Insecticide spraying
- Off-road vehicles
- Light pollution



Distribution in Massachusetts
1982 - 2007

Based on records in the
Natural Heritage Database